

THE
LOUISVILLE MEDICAL NEWS.

"NEC TENUI PENNÂ."

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Original.

NOTES ON THE GENESIS OF MALARIA.

A Study in Three Parts.

BY WILLARD HENRY MORSE, M. D.

PART I.

As the result of eight years of investigation of the subject, it gives me pleasure at this time to present to the readers of the NEWS some notes on malaria as it appears to a physician who has found its revelations at the bedside, in the laboratory, and in many a marsh and meadow. The more pleasantly do I do this, because that my earliest study of the matter was made under the inspiration and at the instance of that noble man, the lamented Dr. Cowling, of the NEWS.

"Nothing new," says a recent writer, "can be said of that which is of universal acquaintance." Taking exceptions to this, it is but necessary to urge the universality of our knowledge of malaria. Widely known as the great bug-bear of medicine, few *ma-teries morbi* have claimed a like individuality of importance, or more prominence of gift. Not only does the universal and deadly presence of the factor render it of importance, but it has figured conspicuously in history. Men like Augustus Cæsar, James the First, Cromwell, and Lord Byron, have died of malarial fever, and many others equally as well known. In military enterprises—like the expedition against Carthage in 1741, the Walcheron expedition in 1810, the Cyprus occupation of six years ago, the French invasion of Tunis in 1881, and our Mexican war—malaria has worked sad havoc and frustrated fine military plans. In building our railways and canals, beyond Omaha, and again at Darien and Suez, malaria has interfered. Where mines

are opened, or prairies are plowed, there is seen the dreaded fever. Where other sickness comes there crowds in the touch of the ill influence. Where health and hope and ambition make all they can for human happiness, there always waits the mysterious power that looks for a foothold where it can cause pain.

Is it any wonder then, that, under these and many other circumstances, the scientist is studying the question of malaria as one vital to the universal interest? Is it strange in such light that medical men consider malaria as important, and give it their best thoughts? Is it not always best to risk a study of that which science, medical or other, is making an object of profound research. But a vital matter that concerns the world is not to be hidden where the laboratory only deals with it. Every human being has a live interest in knowing all that can be known of a leading cause of misery and death, and it is therefore without apology that we propose to answer the question, "What is Malaria?"

Just now it is especially difficult to get at a ready answer, or one that the unscientific reader can comprehend. This is because of a recent schism of thought among investigators. For some length of time science has believed in the existence of the malarial germ. It has made it an object of the most profound research, and has sworn by it as a thing of certainty. But a little while ago a German observer expressed it as his belief that there was no such thing as a malarial germ, until now there are doubting ones on every side who are convinced that the germ is a myth. Nevertheless, the present aspect of the question may suggest a mean between the differences after it is opened.

Little difficulties of definition are sometimes provoking. The etymology of the word "malaria" is quite of this character. It is as meaningless a word as was ever

compounded, inasmuch as it lacks one atom of signification. Dr. Macculloch, in 1827, wanted a name for the marsh miasm, and it pleased him to stir up the colloquialisms of Latin and Italian, to coin the word that he derived from *mala* "bad," and *aria* "air." Of course no revelation of the thing signified is gained by the name, that simply means "bad or impure air." The true Italian appellative, *aria cattiva*, is infinitely more proper than this dwarfed attempt at a synonym which we so affectionately pronounce. "Malaria" hides nothing, reveals nothing. We gain no principle of the thing signified when we look at the name, and yet it is the constituent on which all definition depends. Its simplicity of construction is not without its revelation, for the popular theory means little more than the shadow of the word's etymology. This we may receive as the sum of the hypothesis; but, laying all stress on "bad air," there yet remains the unanswered question. All that needs be said, is that the air which we call malaria is said to be air polluted by emanated matter of vegetable origin. This may be written as a fact of theory, and beyond it all is chaotic. There is a substance to the theory which is held as the truth, and which reads that a certain unknown condition of matter, acted on by a certain unknown agency, results in the production of organisms which pollute.

So far the worth of the accepted truth has the merit of reading well, but fallacy, creeping in incidentally as the outcome of research, has broken down one portion of this ingeniously devised truism. Recent experience shows that the question which we have asked will admit of a duplex answer. The time is out of keeping; and why? Simply because it has followed the lead and listened to the teachings of theorists who have introduced and kept in vogue a mode of belief that is wholly antagonistic to the demonstrated fact. The world has been only one half discovered. No less important than this inquiry into the place and condition of the origin of the pollutions which make malarious the air, is that which tells of the specific nature of these pollutions. Time in the worth of theory has written that these pollutions or poisons are germs—or as is more commonly said, noxious germs. The scape-goat in the old Hebrew dispensation was burdened with a load of Jewish sins that were lost in the wilderness. Happily would it be if the "germ theory" was fated to carry the errors that it

bears to some remote wilderness afar from the haunts of man. But something that is almost diametrically opposite is the case. The idea that obtains is that "what Cæsar carries is carried safely;" and any thought, however absurd, that can be carried on the back of the germ theory safely reaches the desired haven, which haven is not by any means of the nature of a wilderness, but rather a firmly established lodgment in the domains of science. According to the new gospel the germ theory is the phenomenon of science. Here and there on every side (here unexpected, and there long sought) the hypothesis is found. On it is laid the irrepressible conflict between the accepted theologies and the spirit of research. To it yield the traditions of a faith dearer to true science than all of the advances of knowledge known to cherished aspiration or to the sentiments of mental perpetuity. Great indeed is the germ theory, the goddess of medical science! We are witness to the apotheosis of germs. Every child who dares to claim the honored name of scientist finds them in every clod, in every zephyr, in every dew-drop. All means are put forth to their discovery. The microscope is prostituted to this search; in the scales the thing is weighed; in the refining cup it is tried. The mind of medical science makes germs its chief thought, and without germs it is probable that science would lose that which might be termed its religion.

Is it strange, in the face of these facts, that it should have been thought, and the thought have been accepted as very truth, that the peculiar poison that emanates from certain conditions of soil and water should have been esteemed as germs? We are not only schooled to put faith in germs, but, as has just been said, we are in the habit of looking for them every where. It was originally said, and is said to-day, that the whole universe of germs is put to shame if it is not made responsible for every individual object of existence. And not only is the germ world put to fault, but every germ in its own organism and in its independent relation is held to account. One germ may not be more valuable than is another, and yet we are in want of a thought which shall pronounce the world of germs purely and indivisibly republican. Indeed, the original feeling seems to have been that if some germ or other was not made equal to the task of being causative of the creation of malaria, the germ theory, and science

indirectly, would suffer shame and ignominy. Of course such an idea tends to repress self-assertion and to make one content with accepting quietly his little share of life and action. But it is not the brilliant presence of scientific discovery. We sit to-day in the worn seat of our fathers, and believe fondly that out of some strange and and mysterious condition of vegetable matter, acted on by an equally unknown and foreign factor, arise germs that taint the air that we breathe, and so tainting procreate that which we call malaria. I say that we believe this; more than believing upon such a basis, we make it an article of our scientific creed on which we pin all that is dearest in our faith. The germ theory, the modern Circe, has beguiled the student of malaria from his voyage to the Hesperides, and transforms him into her voiceless devotee. This is of the nature of a confession, and yet we find very few who so confess.

It has been said that every child is a natural Ptolemaist who must be educated to the Copernician system; so every child in science is naturally a believer in the theory of germs, and only the hardest of hard study can educate him from that belief. But is such a change necessary? Is such a heresy profitable? A creed that can not undergo the most extreme test, and that is weak in any part, is not one in which to seek repose. The outer territories of the germ theory are ill-defended, and hence skepticism unfriendly to its weakness arises. I do not have aught against the germ theory, but I do blame it for the evidences that it shows of having misplaced its alliances. Great is the germ theory, and grand is that honor which is due to it! The subject as studied is not only interesting, but as well it is entrancing. What can be more pleasing to the student than to engage in its consideration? But the germ theory of disease, beautiful though it is, is not infallible, and loses much ere it can be called perfect. This is the heresy of the connection.

Perhaps the best definition of a germ that has ever been given is that of Beale, so familiar to us all. This authority says: "A germ is a living particle which has been detached from already-existing living matter." The statement of the case follows readily. The study of the mode by which the influence of such particles cause diseases constitutes the germ theory of disease. The natural inference is that such germs are noxious by nature, and that, entering into the system, by fermentative effort, they cause

disease. This is all very well, and I do not say but what this is all very true. But we are to look further. Leaving alone that which is general in its essence, it is advisable that we consider the special subject to which our attention is directed. The germ theory has broadened until it covers imperfectly too much ground. As we have seen, the hypothesis of malaria is related to it, and yet the relation is not firm. Paradoxical as it may seem, this relationship is not legitimate, and moreover by its illegitimacy it throws a new and a changing light on the great theory to which it belongs. Malaria, or *aria mala*, is never used in Italy, where the principle is called *aria cattiva*; and the Italian school of thinkers, led by the great Tomaso Crudelli, are fighting the germ business as they whilom fought Macculloch's new word.

It is interesting, and seems to me quite proper, to pause for the moment to see how Italy answers our question, inasmuch as that State furnishes us with one of the most notoriously deadly of malarious sections—the *Campagna di Roma*. While we need not go to the Indian hot-bed of cholera to study it, or to Havana to see yellow fever as it is, yet we would like to see both places, and talk with the resident medical gentlemen on the subject of the two disorders. All of us who take any interest in Roman antiquities have them associated in our minds with the mysterious and insidious fevers of Rome and its vicinity. Therefore it is that I think we would be pleased to know that the studies of Dr. Crudelli and Dr. Klebs, of Prague, have suggested historical questions of the greatest value now in process of solution. Again, the high-school boy or girl, who has wondered why the now deserted Campagna was once populous, will perhaps be glad to know the reason. Our teachers have guessed answers for us and that was all. Now these two scientists have found that the change in the salubrity of the Campagna is due to the fact that once it was drained, and now it is not. I see by a recent paper that the Government of Italy proposes general drainage, in hope of economic gain and of health. Dr. Crudelli is to have charge of this, I think, and I opine that in a few years we can enjoy Rome as we now do Paris.

But of necessity this matter of sanitary effort is not Crudelli's *coup*. As I have said, he and his co-laborers are at war with the theory that a mystic germ causes malarial disorders. When these men cut loose from

their adherence they made another and an equally remarkable affiliation. They found in the undrained soil a microscopic plant that they named *Bacillus malariae*, and, from having found it where malaria exists, they confidently set forth that a bacillus is the cause of paludal disorders. Dr. Crudelli I do not know, but Prof. Klebs is an enthusiast who jumps amazingly at, over, and off of conclusions. Yet it was quite natural for the two doctors to arrive at this conclusion, and they thought it confirmed when, on making subterranean explorations in the net-work of ancient drains and tunnels, they found no bacilli. If they moistened this soil the plant appeared, but died with new drought. Hence, at the same time that they were showing us the archeological proofs of the unrivaled genius of the Romans or their predecessors, they suborned the voice of the past to show how a fatal disease was checked. But the observers were too local—too much stress was placed on a plant that is hard to find elsewhere. Rejecting germs, and adopting the bacilli, they simply took the first step toward pointing out the real cause. It has been said that an eclipse of imagination would chill and benumb science, but it is worthy of note that that which is a vapid and artificial reality can not be eclipsed.

Faith in Lancisci and his creed, although more than a century and a half old, is not without its broken foundation. The Lanciscian "marsh miasm" has ever continued to be a dissipated thought. The lines of the theory have divaricated as the century has gone by. As axiom after axiom of the theory has proved untenable, the Flints, the Erbs, and the Watsons have doubted. But their doubt has in no wise become rank skepticism, and a constant waiting for renewed proof postponed the rise of that heresy which has been slowly advancing with the fleeting time. The Italian's hypothesis endured as a thing of beauty until malaria appeared, not only where it had never been expected, but in places where the theory had said it could not come. Among the points relative to our existing knowledge of malaria, two of the most conspicuous have only recently been outlawed. In their connection they were allied. Less than ten years ago we believed that malaria was never developed at a lower temperature than 60°, and that it was checked by a temperature of 32°. But we have watched the intermittent pulse of malarial disease in mid-winter; and in October, when the tempera-

ture is moist, often below 60°, the strength of the influence of malaria is not dimmed. All through the months of the year the effects of the poison are felt, and temperature is without any significance.

Another article of the creed states that malaria affects by preference low and moist localities. This is a modification of the original idea which stated that the poison is marsh-born, but, like it, it is untenable. The old evidence was to the effect that marshes govern the emanation of the pollutions. Now the substitutive thought is that the governing power is the moisture of low lands. But this theory has been overthrown by the rising of the facts. Malarial fever is as prevalent (if other things be equal) among the Catskills as in the valley of the Hudson, on the heights of the Blue Ridge as in the meadows of the Potomac, in New Hampshire as in Connecticut.

Just twenty years ago the United States Sanitary Commission published as a part of their notable report the axiom that, "In proportion as countries previously malarious are cleared up and thickly settled periodical fevers disappear." This sounds very well, and is of the modern gospel; but it is flimsy fallacy. Kansas furnishes evidence that breaks down this hypothesis. There are towns in that State, growing in population year by year and situate in the midst of fertile agricultural lands, that are as much afflicted with intermittents as they were when they were first settled. Southeastern Minnesota furnishes other such towns, and there are towns of the same class in Missouri. How things are changed since 1864! The same Sanitary Commission also wrote these words: "Malaria is most abundant as we approach the equator or the sea-coast." The coast referred to is the Atlantic, for such a rule can not apply to the Pacific. But look at it! Beyond the Mississippi—far from the sea-board and the equator—malaria is more abundant than any where else in the Union, not excepting Ohio or Illinois. If the sea-board States be alone considered, the rule still fails. Is malaria more prevalent in New York than in Buffalo, in Richmond than in Wheeling?

Again, it is held that the malarial germs have an affinity for dense foliage, and that woods, by obstructing their passage, prevent their transmission. This may hold true in some instances; but I have in mind two New England towns that are equally malarious, which have a forest between them, and are geographically in the line of

the prevailing wind. This is not a solitary case, and many other physicians have noticed the same thing. Correlative, it is held that atmospheric currents transport malarial germs to considerable distances. This can not be denied, because if there are such organisms as malarial germs floating in the air, the wind will play with them as it wills.

Another—and that not the least of the most commonly-spoken premises of the hypothesis—is that which states that in previously healthy places malaria may be developed by the turning up of the soil. This is used as a prime argument in proof of the responsibility of germs.

I am aware that in localities that have always been pure of malaria it has appeared at the instance of the building of railroads and canals. But it may be asked in point, if the building of the Union Pacific Railroad was the cause of the appearance of malaria in Kearney and Julesburg, in Kansas, why did not the building of the Hudson River Railroad act as causative of the noxious agent in towns along its line? If turning up the soil in an Iowa town when cellars are dug causes the inception of malaria there, why does not the same work in a Pennsylvania town cause the same inception? On the Western prairies the farmer plows from sunrise till noonday, and all of the afternoon suffers from malarial fever. If the malaria is developed because of the rise of germs from the freshly-turned soil, why does not the Massachusetts farmer who plows all day suffer as does his Iowa brother? There is no given answer, although it is said that the disturbed soil in some of the malarious districts of the West is of a different character from that which is most commonly found in the healthier States. This is but another fragment of fallacy. The most expert analyst could not detect any fundamental difference between the soil from the malarious Oakland Valley of Iowa and that of the meadows of the Schuylkill, where malaria is most rare. Again, there are towns in the Connecticut Valley where the soil is of a peculiar sandy loam, and where malaria has appeared within five years. There is no other such soil in America, excepting that of a strip of country in the neighborhood of Stanstead, P. Q., a locality where malaria is rarely if ever seen. The soil and operations in the soil can not reasonably be said to be factors in the cause of malaria. Yet such is the theory; and the fallacy of the idea

shows plainly on its face. It is, however, said in connection, that after systematic sub-soil drainage and cultivation the soil parts with the power of producing malarial germs. We have nothing to prove that this is not so; and, on the contrary, there are no proofs that it is so. Yet, after nearly a century of cultivation on Massachusetts farms, the appearance of malarial fever has surprised the theorists.

Apropos, it is said in the theory that the germs are readily set free from the soil by the atmosphere permeating it and again escaping, and by water acting in the same way. That which we call science is anxious to prove that the telluric germs escape from mother soil. But water and air pass through soils in certain localities all through the weeks of summer, and nothing is seen of malaria.

The preceptors of the present generation of physicians taught that malaria is never generated in places having an altitude above one thousand feet; and one of our best modern authors asserts that malaria can not climb mountains. This might have been so once, but now the dread agent of disease is as much at home on the Berkshire Hills and the Carolinian Alleghanies as it is on the prairies of the West. Indeed, the best lessons that have come to us relate to altitude. Up among the rocky hills of Spain, where no soil lies, and where vegetation is impossible, remittent fevers rage with a malignity only equaled by that manifested in the arid plains and table-lands of the neighboring districts of Portugal.

NEW YORK.

Miscellany.

LOCAL ANESTHESIA.—It is said upon reliable authority that local anesthesia may be readily produced by applying with a camel's-hair brush the following mixture: Chloral and camphor, each, one dram; morph. sulphat., one half dram; chloroform, one dram; mix. To be applied with a brush to the area to be incised.—*Canada Lancet*.

IODIDE OF POTASSIUM IN ECZEMA.—Dr. Stelwagon, in Philadelphia Medical News, recommends iodide of potassium in eczema. He says that in many cases it renders good service. It is more clearly indicated in sub-acute and chronic eczema. In relapsing

eczema of children its benefit was most marked. It is best given to children in syrup of orange peel; for adults, Huxham's tincture and tr. gentian compound are the best vehicles. It seems to have more effect when the stomach is empty, and is usually best given a half hour before meals.

In the early stage of tonsillitis bicarbonate of sodium will frequently relieve the pain and arrest the inflammation. It can be applied by the patient himself, by moistening the tip of the index finger, dipping it into the dry salt, and then, carrying the finger into the mouth, rubbing the soda over the inflamed tonsil. Repeated applications are to be made at intervals of five minutes. After five or six applications the act of swallowing will be nearly painless. A thorough use of the soda early in the disease will abort the attack and promote resolution.

MEDICAL expert (on the witness-stand): "No, sir, it would have been impossible for the accused to quietly think out his plans for committing the murder while walking on Broadway."

Counsel for the defendant: "State why, doctor."

Medical expert: "Because Broadway is the main artery of the city, and my professional skill teaches me that a quiet vein of thought on a main artery is paradoxical and absurd."—*New York Medical Record*.

A TEST FOR ALBUMEN IN THE URINE.—Dr. Kemper writes to the Medical Record: "Take a solution of salt and vinegar in a test-tube, heat over a lamp, then overlay the solution with one drop of the suspected urine, and if albumen be present, it will be indicated by the appearance of a coagulum on the test solution. If no coagulum appear, albumen is not present. This test is given by Prof. J. North as a modification of the acidulated brine test."

In order to settle the relations of the comma-bacillus to cholera two Italian gentlemen offer, through the *Deritto*, a newspaper of Rome, "to eat such a quantity of gelatine containing the *microbe* as a scientific commission may judge sufficient to determine the development of cholera, upon condition only that their names be absolutely incognito, and that in case of their death the government or some rich philanthropist shall take charge of their families.

TURPENTINE IN THE TREATMENT OF PSORIASIS.—In the Practitioner for March, Dr. H. R. Crocker speaks highly of turpentine in certain cutaneous diseases. His experience in thirty cases of psoriasis proves that this drug is valuable. No external applications whatever were used; in all marked improvement was manifest. He gave 15 to 30 minims of ol. terebinthinæ in an emulsion of acacia.

In the *Centralblatt für Gynäkologie*, Dr. Roth regards globus hystericus as due to a paresthesia of the sympathetic. And as the pellitory root has been found useful in paralysis of the tongue and pharynx, the author was led to try it in globus. He gives from ten to twenty drops of tincture of pyrethrum four times a day. He reports six cases in which he employed it.—*Medical and Surgical Reporter*.

THE Sixtieth Annual Commencement of the Jefferson Medical College was held in the Academy of Music, Philadelphia, April 2d. The degree of "M.D." was conferred on one hundred and seventy-six young men.

NAPHTHA IN CONSUMPTION.—Mr. Gilbert Richardson speaks highly of the rectified pyroxylic spirit in the treatment of consumption. He reports one case where it worked very satisfactorily.

A SOLUTION of sulphate of copper, 1 part in 100, is a valuable antiseptic, especially in midwifery, and may be safely used, both for its antiseptic and astringent qualities, as an intra-uterine injection.

THE WEEKLY DRUG NEWS will hereafter be published by the Druggists' Circular. It will contain not only market reports, but society news, and matters to which a monthly can give but little attention.

DR. JAMES L. LITTLE, Professor of Clinical and Operative Surgery in the New York Post-Graduate Medical School, died in New York City, April 4th, of peritonitis.

WHENEVER a Louisville doctor passes a corner pump he feels the germ of a new theory awakening within him.—*This and That*, *Courier-Journal*.

A TWO-PER-CENT SOLUTION of cocaine painted over the part is said to allay the pain following burns and scalds.

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BROWN-SÉQUARD ON COCAINE.

The Paris correspondent of the *Lancet* (March 28th) gives a summary of a note on the analgetic action of cocaine, read by Prof. Brown-Séquard at a recent meeting of the Société de Biologie. This observer proves by experiment that the drug acts through the medium of the peripheric nerves on the nervous centers, which react in reproducing an inhibition of sensibility. A jet of carbonic-acid gas on the laryngeal mucous membrane, or an injection of cocaine at the level of the larynx will produce absolutely the same phenomena. Two minutes after this injection there is a generalized anesthesia and an analgesia of any wounds made on the body of the animal. The cutaneous anesthesia lasts only for a few minutes, but the analgesia of the wounds may persist until the following day. If fresh wounds are made, these, far from being analgetic, become, on the contrary, hyperalgetic. Injections of cocaine sometimes produce in the animal a rolling motion to the side opposite that of the injection, and sometimes a turning motion; this proves that the drug acts on the nervous centers, and particularly on the cerebellum.

Evidence of the inhibitory action of the drug may be found in this, that when the dose of cocaine injected has been large enough to produce convulsions these may be stopped at once by pulling or forcibly flexing the animal's toes. In animals which died under a toxic dose of cocaine he found just after death a body temperature of 111.6° F.

These observations show that cocaine is no exception to the rule that a remedy which is potent for good may also be potent for evil, and sound the warning of "breakers ahead" for those who fail to use the drug without accurate knowledge of its power, and an eye single to its physiological effects.

A NEW TEST FOR BILE ACIDS IN THE URINE.

The *Lancet* of March 7th states that Dr. Oliver, of Harrowgate, who has become widely known to the profession through the celebrated urinary test papers of which he is the inventor, has devised a new test for bile acids in the urine. Taking account of the physiological fact that when the acid peptones resulting from stomach digestion come in contact with the bile in the duodenum, they are instantly and completely precipitated, he was led to use as a test re-agent an acidulous antiseptic solution of peptone. This, when dropped into a specimen of urine containing a bile acid or salt, throws down a precipitate resembling that produced by nitric acid in the presence of albumen. "By using a standard of opacity to represent the very delicate reaction induced in normal urine, Dr Oliver shows how the quantity of the bile derivatives, as they appear in the marked deviations encountered in disease, can be readily gauged." By this means he has found that the bile acids are present in considerable amount, not only in the urine passed during jaundice and other hepatic affections, but in that of patients affected with anemia (simple or idiopathic, leucocythemic or malarial) and some other diseases.

Dr. Oliver's detailed account of his studies in this department of research, which it is said is soon to see the light, will be awaited with no little interest. Hitherto, in consequence of the difficulty of finding by means of any practicable test bile acids in the urine, their presence and significance in many hepatic derangements have been either ignored or denied by our various standard writers. The only test for these substances available till now was that of Pettenkofer, and this, as every chemist knows, will, when applied as not a few authors direct, find bile in plenty in every specimen selected for experiment. To make the test of Pettenkofer of any real service, the bile acids must be isolated by a tedious and elaborate process, during the execution of which it is probable that much of the material which the chemist would save goes by the board. The bile pigments which respond with more or less readiness to oxidizing agents are, therefore, the chief if not the sole reliance of the clinician in detecting hepatic derangement or disease, so far as the urine may indicate it in the absence of signs visible in other parts of the economy; but these are soon oxidized in the air, and often when fresh, if present in small amount, give either a faint response or no sign when treated with the tests in common use. It is therefore desirable that some ingredient of the bile more stable than the pigment should be made available in testing for diagnostic purposes; and since it is probable that bile never appears in the urine without its characteristic salts or their derivatives, an effective and easily managed test, to which the bile acids will respond freely and under all conditions, can not but be regarded as a discovery of great clinical value.

PROF. DAVID W. YANDELL, of Louisville, is to preside over the Section of Surgery at the next International Medical Congress. In this selection the Executive Committee has made wise provision for the honor of American Surgery.

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Elements of Surgical Diagnosis. By A. Pearce Gould, M. S., M. B., Lond., F. R. C. S., Eng.; Assistant Surgeon to the Middlesex Hospital, London; Surgeon to the London Temperance Hospital and to the Royal Hospital for the Diseases of the Chest. Philadelphia: Henry C. Lea's Son & Co. 1884. For sale by John P. Morton & Co.

Specialties, and Their Relations to the Medical Profession. By L. Duncan Bulkley, A. M., M. D., Attending Physician for Skin and Venereal Diseases at the New York Hospital, etc. Read before the American Academy of Medicine at the annual meeting in Baltimore, Md. 1884. Reprint. Chicago: Review Printing Company. 1885.

A Manual of Organic Materia Medica: Being a Guide to Materia Medica of the Vegetable and Animal Kingdoms for the use of Students, Druggists, Pharmacists, and Physicians. By John M. Maisch, Phar. D., Professor of Materia Medica and Botany in the Philadelphia College of Pharmacy. Second edition, with two hundred and forty-two illustrations. Philadelphia: Lea Brothers & Co. 1885. For sale by John P. Morton & Co.

Intestinal Obstruction: Its Varieties, with their Pathology and Diagnosis and Treatment. The Jacksonian Prize Essay of the Royal College of Surgeons, of England, 1883. By Frederick Treves, F. R. C. S., Surgeon and Lecturer on Anatomy at the London Hospital; Hunterian Professor of Anatomy at the Royal College of Surgeons, of England. With sixty illustrations. Philadelphia: Henry C. Lea's Son & Co. 1884. For sale by John P. Morton & Co.

A Manual for the Practice of Surgery. By Thomas Bryant, F. R. C. S., Member of the Council and Court of Examiners of the Royal College of Surgeons; Senior Surgeon to, and Lecturer on Surgery at Guy's Hospital; Memb. Correspond. de La Societe de Chirurgie de Paris. With seven hundred and twenty-seven illustrations. Fourth edition, thoroughly revised. Philadelphia: Henry C. Lea's Son & Co. 1885. For sale by John P. Morton & Co.

The Principles and Practice of Gynecology. By Thomas Addis Emmet, M. D., LL. D., Surgeon to the Woman's Hospital of the State of New York; Ex-President of the American Gynecological Society, and New York Obstetrical Society; Honorary Fellow of the Obstetrical Societies of Bos-

ton, Philadelphia, Louisville, Little Rock, Berlin, and Edinburg, etc. Third edition, thoroughly revised. With one hundred and fifty illustrations. Philadelphia: Henry C. Lea's Son & Co. 1884. For sale by John P. Morton & Co.

J. F. Richter, the publisher, of Hamburg, announces that he will soon issue a most interesting work, "Ueber Elephantiasische Formen" (on varieties of elephantiasis), edited by Geh Rath, Professor Dr. Esmarch, of Kiel, and Dr. Kulenkampff, of Bremen. The work will for the first time afford a comprehensive and comparative representation of this group of diseases, in many regards still obscure. It will be fully illustrated. That the work will be an admirable one the name of the editors is a guarantee. The subscription price is sixty marks; if subscribed for before the end of June it will be furnished for fifty marks. The same publisher announces a work by M. Vogel, of Hamburg, "Zymotische Skizzen," price, seven marks fifty pf.

Pharmaceutical.

Conducted by Simon Flexner, Ph. G.

NEW ALKALOIDS.—An examination of the bark of *Remijia purdieana*, by O. Hesse, has revealed the presence of the following interesting principles: Cinchonanine and cinchonine, concusconine, chairamine, conchairamine, chairamidine and conchairamidine. It will be remembered that the cuprea bark, from which large quantities of quinine are now prepared, is related to the bark from which the above bodies were extracted.

KOUMYSS.—It would appear that this preparation of milk is deserving of more attention than has been accorded it heretofore. In a review in the Therapeutic Gazette, it is highly spoken of as a restorative in wasted and enfeebled conditions of the system due to prolonged disease, or when the stomach itself refuses, owing to irritability, or other causes, to either accept or appropriate food of the ordinary kinds.

PUNICINE.—According to C. J. Bender (Pharm. Centralhalle), pomegranate bark contains but one crystallizable and two amorphous alkaloids. He discards the name "Pelletierine" in favor of "Puni-

cine." This seems to us to be a move in the right direction, since arbitrary, and, as is sometimes the case, fantastical methods of naming principles can not too soon be discouraged. The name "Punicine" at once and unmistakably indicates the source, if not the properties of the body it represents, which certainly can not be said of the old one, however much it is desirable to honor great men.

FEROUS IODIDE.—Syrup iodide of iron, which contains ferrous iodide, is so prone to change and become unfit for use, that a method of making it practically unalterable will be received with favor. If a part of the simple syrup used in the manufacture of the syrup under consideration be replaced by glycerine, this end, it seems, will be attained.

Correspondence.

PARIS LETTER.

[FROM OUR SPECIAL CORRESPONDENT.]

It now seems pretty well established that excision of hard chancre succeeds but rarely as a means for aborting syphilis. This fact would prove that at the very moment inoculation is effected, the virus has already penetrated into the neighboring tissues, or in the lymphatic glands. Dr. Hallopeau, physician to the Saint Louis Hospital, lately made a communication to the Clinical Society, of Paris, in which he suggests that we treat the initial lesion by a substance capable of acting on the infectious elements it contains as well as on those that are being absorbed. The good results obtained in the local treatment of malignant pustule by corrosive sublimate, suggested the idea to Dr. Hallopeau to try the remedy in the case under consideration. He observes, however, that to be successful the application of the caustic (corrosive sublimate in powder) should be performed immediately, or at most within a few hours of the appearance of the chancre. To justify his theory, the author remarks that it is not proved that the organism is infected at the very moment when the process of incubation at the seat of the introduction of the virus produces ulceration and the initial induration; the inoculations practiced with the liquid secreted at this time by the hard chancre have not always proved effectual; on the other hand, a certain lapse

of time necessarily takes place between the appearance of the initial induration and that of the enlarged glands, and later on of the development of roseola; these, it would appear, are so many preliminary stages through which the virus has to pass before penetrating into the tissues. If these views be correct, adds the author, the employment in the period which precedes the enlargement of the glands of a local remedy capable of acting on the virus contained in the induration, and on that which is being absorbed by the lymphatics, is rational and deserves to be tried, and however feeble may be the chance of success, it is sufficient to justify the application of the remedy in question.

Since the recent discovery of the anesthetic property of cocaine by Dr. Koller, of Vienna, this substance has been applied to other organs than those of the eye. As regards the latter, however, it would appear that according to Professor Panas, an eminent ophthalmologist, the advantages are not so complete as the observations of Dr. Koller would lead one to expect. M. Panas declared, at the Paris Academy of Medicine, that while the action of cocaine on ocular membranes uninflamed was incontestable, it was, on the contrary, very contestable when the latter were inflamed. Thus, for instance, in conjunctivitis, keratitis, iritis, the anesthetic properties of cocaine are nil. Another peculiarity is that the anesthesia produced by cocaine was very unstable and very superficial. "No doubt," said the learned professor, "that an incision of the cornea would be insensible, but when practiced on the deeper tissues, in iridectomy for instance, the patient feels the operation just the same as if the cocaine had not been employed." But Professor Panas has been rather premature in his conclusions, for it has since been ascertained that to extend the anesthetic of cocaine to the deeper tissues and to increase their duration, it is only necessary to use a more or less concentrated solution, according to circumstances.

The anesthetic property of cocaine has been taken advantage of and applied to every organ where there was a mucous membrane. Thus, for instance, for operations in the mouth, the nostrils, the larynx, the trachea, the urethra, the vagina, the rectum, the stomach, etc., the application of cocaine has been found invaluable. Not long ago, Dr. Cazin, of Boulogne, cured a case of vaginismus in a patient that had for many years suffered from this painful mal-

ady, so much so that coitus was simply impossible. The application of a two-per-cent solution of the hydrochlorate of cocaine to the vulva and the interior of the vagina sufficed to remove the hyperesthesia, and if it did not cure the vaginismus permanently, the effects lasted sufficiently long to permit coitus without any suffering. Dr. Theophile Anger, hospital surgeon, reported a similar cure to the Surgical Society, of Paris. Other practitioners have found that when the introduction of the speculum becomes impossible from over sensitiveness, it is sufficient to paint the vulval orifice with a solution of the above strength to overcome the difficulty. Dr. Dujardin-Beaumetz, hospital physician, and a therapist of some note, has lately cured a case of fissure of the anus with the same substance.

It is considered probable that the anesthetic property of cocaine may be extended to the cutaneous coverings. Up till now, the cases in which the alkaloid has been employed in this direction are not numerous, but the results obtained are rather encouraging. The case of Dr. Hepburn, of New York, has been frequently quoted in support of this view. I may here recall the case referred to. After having injected six drops of a solution of cocaine in the forearm, Dr. Hepburn noticed that an anesthetic zone of some extent was formed around the seat of the puncture. The experiment was renewed, and the whole arm was covered with successive anesthetic patches. More recently, Professor Vulpian presented to the Academy of Sciences a note from M. Grasset on the same subject. The author concludes from his experiments that he is led to hope that cocaine will render to general surgery the service that it has already rendered to ophthalmology. There is every reason to hope that at least for certain operations a sufficient degree of anesthesia will be produced without sleep and without affecting the general system. The author adds that, in fact, the injection of one centigram of the hydrochlorate of cocaine produces, in man, an anesthetic zone perfectly marked, without general phenomena and with very slight local results. This anesthesia lasts a sufficient time to enable the surgeon to perform a certain number of operations. This would be an immense advantage, and the author predicts that, if judiciously employed, cocaine and its preparations may yet supersede the use of chloroform and like anesthetics. For surgical operations, it is recommended that the liquid

should be injected just below the seat of the intended incision, and the operation should be performed in from five to ten minutes after the injection.

PARIS, March 20, 1885.

NEW YORK LETTER.

Editors Louisville Medical News:

Among the many new things seen and heard since my arrival in Gotham, I notice that every surgical operation is done under the strictest antiseptic precautions, a solution of the bichloride of mercury, 1 to 1000 or 1 to 2000, being the antiseptic agent employed. The operator and his assistants wash their hands frequently in clean water, while the instruments to be used are kept in a solution of the bichloride, the wound being frequently flooded with the same during the operation. I am informed by Drs. Wyeth and Gibney that they have seldom had an untoward symptom, so far as healing of the wound and septic poisoning are concerned, since the introduction of the bichloride solution into their clinics. Carbolic acid seems to have been abandoned. I have not seen it used in any operation since my arrival here, and I have witnessed quite a number every day.

I saw my friend, Dr. John A. Wyeth (a graduate of the University of Louisville, and classmate of mine in 1867-8), do an operation yesterday at the Mount Sinai Hospital, known among surgeons as McNamara's operation for the radical cure of hip-joint disease in the early stage of that affection. The operation consists in cutting down upon the trochanter major, when, after peeling back the periosteum, a hole is made by means of an ordinary trephine through the trochanter into the medullary canal, or rather into the cancellated structure of the neck of the femur. Then, with a drill about the size of an ordinary lead pencil, a canal is cut along through the neck of the femur, following the central line up into but not through the head, care being taken to avoid penetrating the joint. Dr. Wyeth explained to his class that as the seat of the disease ("caries," as we have been accustomed to hearing it called, but known among the New York surgeons as "tubercular degeneration") is, in the great majority of cases, in the central part of the head of the femur, that therefore this operation is a rational one, because it affords free drainage, and thus pre-

vents pus from working toward the cavity of the joint. After drilling well up into the head of the bone, a probe with a spoon-shaped end was passed in, and a considerable amount of cheesy and gelatinous material scooped out; after which a drainage-tube was pushed well up into the canal, and the external wound, which had been made as large as the palm of the hand, was stuffed full of antiseptic gauze, covered thickly with iodoform, and then with a thick wad of absorbent cotton.

I mention this operation somewhat in detail because it is the first time it has been performed in America, and perhaps only the seventh time in the world; a surgeon in Europe, by whose name it is known, having done the operation half a dozen times before, with, as he reports, rapid and brilliant results. A number of prominent surgeons of this city were present at the operation, and the result will be watched closely. I overheard several of them discussing Mc-Namara's operation, and the prevailing opinion seemed to be that it promised to work a revolution in the treatment of the much-dreaded affection known as hip-joint disease.

I attended the meeting of the New York Pathological Society last night, of which Dr. Wyeth is the recently elected president. A number of interesting papers were read, each of which was accompanied by a pathological specimen to be presented to the Society. (I believe it is a by-law of the Society that with every case reported a pathological specimen must be presented). Two of these reports were especially interesting. One was a specimen showing intussusception of the bowel in a child six months old, presented by Dr. J. Lewis Smith, the eminent writer on Children's Diseases. In this case the ileum was invaginated into the ascending colon to the distance of about four inches, carrying with it the caput-coli. The treatment the doctor had employed was injections of warm water, carried on at short intervals for two days, after which, having failed to give relief, he determined to make an abdominal section, but the patient died before he was able to operate. One point upon which Dr. Smith laid special stress was, that we should not delay the operation longer than one day, if relief be not had in that time by water injections or inflation with air. However, he discourages a resort to the latter device, believing that there is great danger under its use of rupturing the intestine.

The other paper was presented by the Microscopical section of the Society, being a report upon a new substance for embedding tissues preparatory to making sections for mounting. Bayberry-tallow, it is called. It is obtained from the ordinary bayberry-bush, and is used by furniture manufacturers for oiling the sliding surfaces of bureau-drawers, etc. They claim for the bayberry-tallow that it is cheaper and better than celluloidine, and far superior to paraffine and other kinds of wax heretofore used. A special feature claimed for it is non-solubility in alcohol except when warmed to about the temperature of the body or a little above it, and hence the specimen may be kept indefinitely in alcohol at ordinary temperatures. Another count to the credit of the new tallow is that tissues injected with it or embedded in it can be shaved in thinner sections than those allowed by other materials, and that on account of its firmness it allows of a more even cut. After making a section the tallow may be removed from the specimen by simply placing it for a few minutes in a bath of warm alcohol. The exhibitor took occasion to mention the usual precaution that in heating the alcohol it must not be held over a flame, etc. The specimen presented with the paper was a section of the smallest bronchi, which showed up beautifully under a low magnifying power.

R. B. GILBERT, M. D.

NEW YORK, April 9, 1885.

Translations.

THE USE OF THE RUSSIAN STEAM BATH IN DIPHTHERIA, CROUPOUS STENOSIS OF THE AIR PASSAGES.*—Carl Herman Pfeiffer and The. Griebner have treated diphtheria in this manner: The patient must first receive several glasses, as many as possible, of warm tea or thinned milk to drink, whereupon the cold legs and feet must be put, for a long time, in hot water or be washed with cold water and soap and then rubbed dry. Then they are rubbed with the dry palm of the hand of a strong person, or with something similar to the flesh-brush, until very hot. This rubbing will be made easier if a little oil is dropped on the skin after it becomes dry. If dysphagia occurs one should give a tea-spoonful of cod-liver oil or sweet oil. When the hands and feet have become

*Translated from Dr. Foerster, of Dresden, in *Jahrbuch für Kinderhulk*, by E. S. McKee, M. D., Cincinnati, O.

warm the drinking is continued. In diphtheria which is pretty well advanced the patient must be brought into a well-ventilated room and given a few glasses of good Spanish wine, mixed with equal parts of water, and then some cups of tea or lemonade. Then follow sharp cold rubbings, succeeded by hot rubbings; then more glasses of liquid are given. At last the patient is wrapped up in air-tight woolen cloths and covered. If he can be made to sweat, then he is saved. After the sweating the flabby skin, in case it shows no eruption, must again be washed with cold water and rubbed with damp cloths. If an eruption follows, the cold rubbing is to be discontinued. The patient is now to be kept in a regular and warm temperature. He can eat any thing that he has appetite for, unless it is difficult of digestion; exciting drinks should be avoided. If weakness of the stomach and nerves are present, the patient should have a carefully selected, strong diet.

Dr. Wachsmuth, of Berlin, was the first physician who favored this means of treatment. He considered it good, if not the best.

Dr. Wilhelm Hübner combines the diaphoretic treatment with emetics and mercurials internally. He gives first, every fifteen minutes, a powder of ipecac. and tartrate of antimony, of each five grains, until complete emesis follows. He then begins the sweat cure. After washing the body with equal parts of vinegar and water, 8° to 12° Reaumur warm, he wraps the body up in damp linen, and over this a dry woolen cover; then wraps the patient up well. Previously a damp handkerchief of the same temperature is laid over the anterior surface of the body, so that the arms do not come in contact with the skin. The external treatment is continued until a miliar eruption occurs; after the heating of this the fever disappears. To overcome the severe inflammation in the throat ungt. bellad. hydrargyri and cinnamon (ex. bellad. 0.5-15 grams) should be rubbed over the salivary glands and air-passages twice a day. Then lay a cloth soaked in cold water about the neck, and over that a woolen cloth. Argenti nitras or gargles of lime-water should be applied directly to the fungus formations in the throat. Salicylic acid or hydrochloric acid can be painted on these formations. It is very good practice to use an infusion of an ointment with vinegar as a gargle; also

to open the bowels well with infus. rad. rhei or fol. sennæ, with addition of chloride of ammonium or sulph. of magnesium. In tender children the treatment sometimes undergoes some alterations; for instance, after oft-repeated applications of the hydropathic packing, warm bottles are applied to the feet.

TOTAL INVERSION OF THE UTERUS FOLLOWING THE SPONTANEOUS EXPULSION OF A FIBROID POLYPUS; RECOVERY.*—Dr. F. Schavnik, of Krainburg, makes the following report: A woman, aged forty-six, married six weeks, had always felt quite well. Her menses had always appeared with remarkable regularity. Inter-menstrual hemorrhage had never occurred. The patient began to feel drawing pains in her sacral and abdominal regions; a strong hemorrhage immediately took place. This, together with the pain, soon disappeared. After an unusual physical exertion the hemorrhage and pain returned, and shortly thereafter a mass was expelled. The midwife who was called did not recognize what it was. The author was called and found a mass lying between the thighs of the woman. It was the size of a child's head, and covered with bloody coagula. This was united by a string two centimeters long and as thick as the thumb, to a pear-shaped body which projected from the vulval orifice. Further examination showed that a fibroid polypus had been expelled from the uterus—that this polypus was still attached to the uterus, and that it had caused an inversio uteri. The author threw a ligature around the pedicle of the polypus and cut it through. The part attached to the stump of the polypus was left very long. After disinfecting, washing and straightening out the part, the author endeavored to reduce the prolapsus. This was attained with great ease. The uterus contracted beautifully. It was washed out and ergotine used subcutaneously. On the sixth day the stump was expelled, and on the tenth day the woman was up and about. The menstruation returned later and was without pain. The pedunculated fibroid which was expelled, weighed 309 grams, and was 25 centimeters in circumference.

JEFFERSON MEDICAL COLLEGE recently conferred the degree of LL. D. on Dr. Austin Flint, jr.

*Translated from Dr. Foerster, of Dresden, in *Memorabilien*, by E. S. McKee, M. D., Cincinnati, O.

Selections.

WEAK HEART.—Every physician in extensive practice is occasionally brought into contact with cases of heart failure, of which the essential nature is somewhat obscure, and which are frequently recorded when terminating fatally as angina pectoris. As an example of the kind of illness typical of such affections some such history as the following may be taken :

An apparently healthy man of sixty or sixty-five, of florid build and choleric temperament, is attacked, soon after the exhibition of unusual excitement, with acute pains over the cardiac region, accompanied by shooting pains down the left side and arm, and a general sense of oppression. There is no loss of consciousness, no actual paralysis, although some degree of numbness may be experienced in the hand, but without materially diminishing the force of its grasp. Occurring in the absence of the physician, the bystanders administer stimulants and resort to rubbing the arm of the sufferer with resulting relief to the symptoms; and in an hour's time probably the attack so far remits as to admit of the patient's moving about more or less freely, or a fatal termination may then and there occur. It is more likely, however, that, as in the most recent case of the kind we have encountered, an interval of rest will be noticed, and then on a renewal of movement the symptoms will once more set in, this time perhaps less violently than at first, and apparently ending in the appearance of quiet repose, during which death ensues almost without indication of its approach.

Very often the subjects of such illness are unable to recall that they have ever been similarly attacked; they have not, that is, as is usual among the victims of angina pectoris, been for a greater or less number of years suffering from spasmodic affections of the heart, and to their own knowledge this organ of their economy is free from any kind of disease. Nor, as far as our own experience goes, does auscultatory examination yield any positive or reliable signs, with the exception that its sounds are distant and indistinct, but the most careful observation will fail to make out any thing deserving the name of diagnostic indications. Moreover the evidences of cerebral lesions are altogether absent, and the suggestion of any such origin for the symptoms exhibited in the

cases described must be entirely excluded on purely clinical grounds. Neuralgia also can hardly be accepted as explaining the phenomena, inasmuch as a sudden single attack of so violent a nature as to produce a fatal result is improbable, to say the least; and wherever this cause is responsible for death it is reasonable to assume that the final illness will have been preceded by less severe indications of cardiac neuroses. It is consequently necessary to look for some other producing cause of the effects, and this may with some assurance be assumed to reside in a deterioration of the heart itself. As already hinted, the subjects generally found to suffer in the manner under discussion are those in whom the existence of fatty heart might be reasonably suspected, and the *modus operandi* of the changes taking place under such conditions is not difficult to comprehend. As the structure of the walls degenerates the propulsive power of the heart is *pari passu* reduced, and a time ultimately arrives when its action suffices only to maintain the circulation under conditions of ordinary and unexcited life. Even now, however, the habits of the individual are unconsciously adapted to the failing strength of the organ, all unusual exercise is avoided, and without at all being aware of the fact, the patient foregoes most of his customary exertion, the only point which presents itself to his mind being that he is "growing old." This may continue for a length of time, but should it happen at any moment that either by indulging in a fit of passion, or by taking sudden and violent exercise, that the heart is called upon to perform a labor beyond its diminished powers, then the strain becomes more than it can resist, and the attack describes results. The popular remedy, a stimulant, usually in the form of whisky, which is at once administered, acts as a temporary aid to the exhausted organ, which however is left in a still more exhausted state when its effects have disappeared, and, being then still under call to continue its normal action, it responds with rapidly lessening strength to the needs of the circulation, and with or without a renewal of severe symptoms it slows into death.

Such we take it is a general explanation of a large proportion of the deaths which have of late figured in reports as being caused by angina pectoris, and the frequency of which has caused some degree of surprise. We can not, however, hope

that treatment is likely to be materially assisted by acceptance of this view, since the structural degeneracy of the implicated organ must necessarily militate against any permanent restoration of its function, the more especially as the occurrence of an attack of illness offers a certain indication of its being inadequate to meet the calls made on its resources. Such failure in fact is proof that the organ has advanced so far in decay as to render its performance of even ordinary work uncertain, and it is suggestive that a great part of the cases observed are seen in persons in whom, on *a priori* grounds, fatty changes are indicated. Possibly, also, many other sudden deaths, the reason for which is often obscure, may have been brought about by similar means, and the subject is at least one worthy of receiving attention.—*Med. Press and Circular*.

LORETA'S OPERATION FOR SACCIFORM AORTIC ANEURISM.—Prof. Loreta, of Bologna, who is already well known to the medical world by his operation of divulsion of the pylorus, has recently performed a very brilliant operation for the relief of a very large sacciform aneurism of the abdominal aorta. It was performed on December 18, 1884, and the patient, at last accounts, was considered well—and cured.

The aneurism was about the size of the head of a fetus at term. The sac occupied the hypogastric and left hypochondriac regions, displacing the spleen and diaphragm.

Loreta made the diagnosis of sacciform aneurism of traumatic origin, due to pressure on the abdominal aorta between the pillars of the diaphragm during violent muscular exertion. The operation was undertaken at the solicitation of the patient, on account of the violent neuralgia from which he suffered, and on account of his rapidly increasing state of malnutrition. An incision was made from just below the sternum to the navel; the parietal peritoneum was adherent to the epiploön, and to the stomach and liver; beneath this there were other adhesions between the stomach and subjacent aneurismal sac. Some of the adhesions were broken up, but the operator did not disturb those between the sac and the liver and spleen for fear of rupturing the sac. Being able to reach neither the aorta, the celiac axis, or the superior mesenteric artery, so as to be absolutely sure of the seat of the aneurism, he cut through the lower fold of the transverse mesocolon, thereby coming immediately to the sac, into which

he thrust a very small trocar and introduced two meters of silvered copper wire. The wound was then closed, the operation lasting an hour and a quarter. The patient had no rise of temperature after the operation, and cicatrization was complete on the ninth day. On the day following the operation the patient was sensible that the pulsations were very much diminished; improvement continued, and on the twenty-sixth day after the operation the tumor was solid, reduced fully one half, and the patient was going about. Loreta is confident that the aneurism was of aortic origin, from the cause assigned by the patient—severe muscular exertion in striking sail, and from the fact that the tumor was larger than would be expected to spring from any other abdominal vessel.—*Journal Am. Med. Assoc.*

UNUSUAL SEQUELA OF OVIARTOMY.—At a meeting of the Clinical Society of London, March 13, 1885 (*British Medical Journal*), Mr. Barwell related the history of a case of ovariectomy followed by unusual sequela. The patient was of fair complexion, and mobile temperament. She came into Charing Cross Hospital, and it was agreed that ovariectomy should be performed. On October 28th, Mr. Barwell removed the left ovary, first withdrawing twenty-three pints of fluid; the pedicle was tied with silk and allowed to fall back into the abdomen. The usual mode of suture was employed. During the three subsequent days menstruation recurred, and some hematuria was observed; it then ceased. On the third day the thermometer stood for two hours at 102.4°, but, with this exception, she never had a temperature worthy of notice. The deep sutures were removed after forty-eight hours. The abdominal wound was healed on November 2d; there was hardly any tenderness in the left groin, or elsewhere. The patient, who was naturally very docile and amenable, showed on November 3d, a contradictory and aggressive temper; on the 5th (eighth day of operation) this had developed into insanity. On November 7th she was so violent that she had to be secured, and this could only be affected by giving a little chloroform. A subcutaneous injection of four minims of solution of morphia only calmed her for three hours. On the 21st, with various phases of comparative violence and calm, but with incessant talking, the patient continued entirely insane, sleeping only in short snatches about two hours out

of the twenty-four until the 19th. She then began to show signs of amelioration, especially in saying that she knew she was mad. On the 21th, Mr. Barwell ordered an ice-bag to the head. After this she slept more, and gradually improved. On the 28th she would be pronounced sane. During all December she was well enough to take walks, but was, for various reasons, kept under supervision until December 29th, when she was discharged in perfect mental and bodily health. In spite of several attacks of violence, and of struggling, the abdominal cicatrix had held well, and there was no sign of hernia; nevertheless, it was thought prudent to provide her with a belt. Mr. Barwell remarked that several views might be taken of this case: (1) There might have been hereditary tendency to insanity. (2) Insanity might follow any of the major operations, ovariectomy not more than any other. (3) It was the result of disturbance of the urinary organs (kidney). (4) It was the result of disturbance of the generative organs. (5) It was mere coincidence. On these views he made the following comments: (1) Great pains were taken to find any trace of mental disturbance in the patient's family. None could be discovered. Her father had died of cerebral apoplexy at an advanced age. (2) If Insanity were an occasional sequela of surgical operations, the matter was not mentioned in surgical writings. (3) The amount of blood lost by the kidney, if any, was insufficient to produce grave effects. Hematuria was not uncommon after intra-peritoneal operations performed under a carbolic spray. (4) Although disturbance of the generative organs appeared, at first sight, to offer the easiest explanation, in this case there were none of the erotic symptoms usually associated with abnormal states of that system. Perhaps some might see an analogy between puerperal insanity and mental disturbance in this case. (5) Mere coincidence might be justly considered the best way of accounting for insanity thus following ovariectomy if this were an isolated instance, but Mr. Barwell was acquainted with several other examples. Thus Dr. Keith had had one case (after hysterectomy); Mr. Thornton two (ovariectomy and hysterectomy); there had been a case at St. Thomas's Hospital, and one had been noted by Mr. Dent. Thus mere coincidence would not account for the circumstances which it appeared desirable should be known in the profession.

JABORANDI IN OBSTINATE HICCUGH.—Pagenstecher (*Ctrbl. f. d. ges. Therap*; *Bull. gén. de Therap.*) reports a case of hiccough which had resisted every known remedy, including the bromides, morphine, chloroform, and electricity. The patient's diaphragm contracted in the most violent manner about twenty or thirty times a minute, and he had been unable to take any nourishment for three days. After receiving four grains of jaborandi-leaves, in the form of a decoction, he had a profuse perspiration, after which the hiccough was completely checked.—*New York Med. Jour.*

ARMY MEDICAL INTELLIGENCE.

OFFICIAL LIST of Changes in the Stations and Duties of Officers serving in the Medical Department of the United States Army, from April 5, 1885, to April 11, 1885:

Biart, Victor, Captain and Assistant Surgeon, leave of absence extended six months on surgeon's certificate of disability. (S. O. 77 A. G. O., April 4, 1885.) *Stevens G. Cowdrey*, Captain and Assistant Surgeon, from Department East to Department Missouri; *Augustus A. De Loffre*, Captain and Assistant Surgeon, from Department East to Department Dakota; *Louis W. Crampton*, Captain and Assistant Surgeon, from Department East to Department Platte; *George H. Torney*, Captain and Assistant Surgeon, from Department Missouri to Department East; *Wm. H. Arthur*, First Lieutenant and Assistant Surgeon, from Department Platte to Department East; *M. C. Wyeth*, First Lieutenant and Assistant Surgeon, from Department Dakota to Department East. (S. O. 77 A. G. O., April 4, 1885.) *E. C. Carter*, First Lieutenant and Assistant Surgeon, granted one month's leave with permission to apply for one month's extension, to take effect upon the arrival of another medical officer at his post. (S. O. 30, Dept. Arizona, March 23, 1885.)

OFFICIAL LIST of Changes of Stations and Duties of Medical Officers of the United States Marine Hospital Service for the week ended April 11, 1885:

Bailhache, B. H., Surgeon, Chairman of Board for physical examination of candidates for appointment as Assistant Engineers, Revenue-Marine Service, April 6, 1885. *Vansant, John*, Surgeon, Chairman of Board for physical examination of officers of the Revenue-Marine Service, April 11, 1885. *Purviance, George*, Surgeon, granted leave of absence for one week, April 6, 1885. *Stoner, G. W.*, Surgeon, member of Board for physical examination of candidates for appointment as Assistant Engineers, Revenue-Marine Service, April 9, 1885. *Godfrey, John*, Surgeon, to represent service at annual meeting of American Medical Association, April 11, 1885. *Goldsbrough, C. B.*, Passed Asst. Surgeon, to proceed to Pascagoula, Miss., as inspector, April 8, 1885. *Carter, H. R.*, Passed Asst. Surgeon, member of Board for physical examination of officers of the Revenue-Marine Service, April 11, 1885.